

Remarks

Claims 1, 4-15, 17-18 and 29-36 remain pending in the present application. It is respectfully submitted that the pending claims define allowable subject matter.

Claims 1 and 13 have been rejected under 35 USC § 102(a) as being anticipated by or, in the alternative, under 35 USC § 103(a) as being obvious over Neuman (USP 6,226,862). Applicants respectfully traverse this rejection for reasons set forth hereafter.

It is respectfully submitted that Neuman fails to teach or suggest the methods of claims 1 and 13, since Neuman does not teach or suggest the mounting or induction heating claimed operations. Claim 1 defines a method of forming an electrical contact comprising mounting a plurality of electrical context on a substrate and induction heating the electrical contacts for a predetermined period of time to heat different first and second portions of the electrical contacts by different first and second amounts. Claim 13 recites a method for fabricating a contact component comprising mounting a plurality of contacts on a substrate and induction heating the contacts by different first and second amounts without induction heating the substrate.

In the outstanding office action, it is maintained that a differential treatment of various portions of a heated material is inherent within the prior art and that portions of the material closer to the heat source will inevitably receive a greater amount of heat than portions further from the heat source. The undersigned respectfully disagrees that Neuman teaches or suggest the claimed induction heating operations.

In Neuman, the leads are flat or planar and lie within the plane of the printed circuit board. The leads are rectangular and uniform in shape and thickness. In the Background Section of the patent, Neuman explains that the leads may have a width of .06 inches and a spacing of .05 inches there between, while the induction loop is held approximately .04 inches from the substrate. Figures 2, 3 and 5 of Neuman illustrate the flexible printed circuit boards and the leads

in cross-section. The leads of Neuman do not include "first and second portions" that are heated by "different first and second amounts." Neuman does not teach or suggest any reason to heat portions of the leads by different amounts. In fact, as previously explained, given the uniform shape and dimension of Neuman's lead, and the alignment of Neuman's lead when passed through the heater 420, each lead would be uniformly heated throughout its entire thickness, length and width.

The present application explains various reasons for, and advantages of, heating different first and second portions of a contact by different first and second amounts. It is respectfully submitted that the claimed induction heating operations are patentable distinct and nonobvious over the induction soldering operation of Neuman.

In the outstanding office action, it is maintained that, absent any qualification of the word "different", any two points A and B of the prior art structure will be heated by different amounts. First, the undersigned disagrees that any two points in a prior art structure will necessarily be heated by different amounts. Secondly, the claim do not recite heating first and second "points" in a structure, but instead clearly recites heating "different first and second portions of each of the electrical contacts". The "portions" are clearly described in the specification in connection at least one embodiment. It is submitted that the claims are clear and do not read on Neuman.

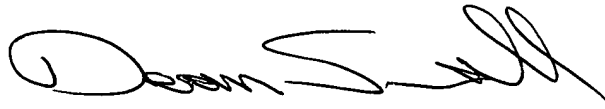
Further, it is submitted that the prior art fails to teach or suggest the additional operations recited in claims 29, 32, 33 and 36. Claims 29 and 33 further define aligning each of the contacts along the longitudinal axis "that extends away from a plane containing the substrate." Neuman does not teach or suggest the claimed alignment. Neuman's leads extend within and along the plane containing the printed circuit board. Neuman's leads do not extend away from the plane containing the printed circuit board.

Claims 32 and 36 further define the shape of the contact to include a base portion and a knee portion aligned in a common contact plane. Neuman's leads do not teach or suggest such

structure. Instead, Neuman describes leads that are rectangular, and of uniform length, width and thickness. It is incorrect and inappropriate to attempt to interpret the claimed terms "base portion" and "knee portion" in the manner suggested in the outstanding office action. Neuman's leads do not include a base portion, nor a knee portion.

In view of the forgoing comments it is respectfully submitted that the pending claims define allowable subject matter. Should anything remain in order to place the present application in condition for allowance, the examiner is kindly invited to contact the undersigned at the telephone number listed below.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Dean D. Small", written over a horizontal line.

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